

**WEST**  

L1: Entry 1 of 2

File: JPAB

Jul 26, 1985

PUB-NO: JP360141648A  
DOCUMENT-IDENTIFIER: JP 60141648 A  
TITLE: ANTIFOGGING GLASS

PUBN-DATE: July 26, 1985

## INVENTOR-INFORMATION:

NAME	COUNTRY
FUKUMOTO, SAKAE	

## ASSIGNEE-INFORMATION:

NAME	COUNTRY
NIPPON SODA CO LTD	

APPL-NO: JP58245769

APPL-DATE: December 29, 1983

US-CL-CURRENT: 428/432; 428/687

INT-CL (IPC): C03C 17/23; H01B 5/14

## ABSTRACT:

PURPOSE: To obtain the titled antifogging glass which can be heated with the small consumption of electricity by providing a transparent electroconductive film layer on the surface of the glass.

CONSTITUTION: A transparent electroconductive film layer consisting of an In<sub>2</sub>O<sub>3</sub> film layer doped with Sn, Sb, etc. or an Sn<sub>2</sub>O<sub>3</sub> film layer doped with Sb is coated on the surface of the glass which is disirably heated, then an electrode reaching the electroconductive film layer is provided, and a lead wire is drawn out from the electrode. Since the surface of the glass can be rapidly heated in this way, the condensation of steam on the surface of the glass is prevented, and the fogging of the glass can be eliminated.

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L1: Entry 2 of 2

File: DWPI

Jul 26, 1985

DERWENT-ACC-NO: 1985-220362

DERWENT-WEEK: 198536

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TITLE: Glass which is free from misting up - has transparent coating of electroconductive material e.g. doped indium oxide

## PATENT-ASSIGNEE:

ASSIGNEE	CODE
NIPPON SODA CO	NIPS

PRIORITY-DATA: 1983JP-0245769 (December 29, 1983)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 60141648 A	July 26, 1985		002	

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP60141648A	December 29, 1983	1983JP-0245769	

INT-CL (IPC): C03C 17/23; H01B 5/14

ABSTRACTED-PUB-NO: JP60141648A

## BASIC-ABSTRACT:

The transparent electro-conductive film layer is e.g. Sn- or Sb-doped In<sub>2</sub>O<sub>3</sub> film layer or Sb-doped SnO<sub>2</sub> film layer.

USE - Glass, the surface of which is able to be rapidly heated by application of electric current to prevent condensation of steam on the surface. Suitable for use as windscreen of a vehicle or mirror in bath room, etc.

In an example, acetyl-acetone soln. of acetylacetato In and diisopropoxy Sn is applied on a soda glass (100 mm x 200 mm x 2 mm) heated at 480 deg. C by means of ultrasonic atomising appts. to form a transparent thin Sn-doped In<sub>2</sub>O<sub>3</sub> film having thickness of 700 angstroms. The soda glass thus treated is then dipped in organic solvent soln. of tetraakisopropoxy silane, and baked at 500 deg. C to form a thin SiO<sub>2</sub> coatings having thickness of 2,000 angstroms. After providing electrodes on the electroconductive film, electric potential

of 15 volts is applied so that the surface of the SiO<sub>2</sub> coatings is heated up to 40 deg. C for 5 mins.

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: GLASS FREE MIST UP TRANSPARENT COATING ELECTROCONDUCTING MATERIAL DOPE INDIUM OXIDE

DERWENT-CLASS: L01 L03 X12 X22 X25

CPI-CODES: L01-G04; L01-H02; L01-L02; L03-A02;

EPI-CODES: X12-D02A; X22-J02; X25-B01C1;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 1515U; 1531U ; 1694P

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